



ROYAL SANITARY INSTITUTE
LONDON
S.W.

CITY OF MELBOURNE



HEALTH COMMITTEE'S REPORT FOR 1927

MEMBERS OF COMMITTEE.

Alderman Stapley (Chairman).
Councillor Sir George Cuscaden.
Councillor Carter.
Councillor Kent Hughes
Councillor Kane.
Councillor Westley.

The Health Committee have the honour to submit their report for the year 1927.

REPORTS OF OFFICERS.

The Report of the Medical Officer of Health (Dr. John Dale), relating to the vital statistics of the City, the prevalence of epidemic diseases, the measures taken to prevent the spread of infection, and the work of the Inspectorial Staff, is attached hereto, together with Reports by Dr. Hilda Bull regarding the progress of the Council's Anti-Diphtheria Campaign, and by Messrs. Dunn and Son, City Analysts, and Dr. Hilda Rennie, Acting-Director of Bacteriological Laboratory, University of Melbourne.

STATISTICS.

According to the return of the Government Statist, the estimated mean population of the City in 1927 was 101,700, which represents an increase of 50, as compared with the previous year. The number of births in 1927, as supplied by the Government Statist, was 1,648, equivalent to a rate of 16.2 per 1,000. The deaths from all causes numbered 1,236. The figures given for births and deaths are not comparable with those given in former reports, as new arrangements have been made regarding source of data and method of calculation of rates.

INFANTILE MORTALITY.

The deaths of children under the age of one year registered during the year numbered 135, which is equivalent to a mortality rate of 8.19 per cent.

INFECTIOUS DISEASES.

There were 107 cases of scarlet fever during the year, or 1.05 per 1,000. This represents an increase of 62 in comparison with the previous year. Only one death occurred, but there was an increase in the virulence of the disease.

There were 192 cases of diphtheria, in comparison with 163 for the previous year. Although there is a slight increase over the number of cases recorded for the two previous years, the reported cases for the past three years constitute the lowest figures for 20 years. The attack rate for 1927 is equivalent to 1.78 per 1,000 of the estimated mean population. Five deaths occurred, representing a death rate of .049 per 1,000 of the population, and a case fatality rate of only 2.6 per cent.

There has been a decrease in the number of cases among children of school age, and the indications seem to be that the methods of prevention employed by the Council are having a beneficial influence on the spread of the disease. Full details of the Council's special campaign against Diphtheria are contained in the reports of the Medical Officer of Health and Dr. Hilda Bull, which are attached hereto.

Ten cases of typhoid fever were reported in 1927. Four cases proved fatal.

There were eight cases of bacillary dysentery during the year, in comparison with nine in 1926.

Three cases of Cerebro-spinal Meningitis occurred in infants, all proving fatal.

Four cases of poliomyelitis were reported during the year, all in little girls. One patient died, and the remainder progressed satisfactorily.

There were five cases of hydatid disease, as compared with one for the previous year, one of the cases proving fatal.

Notifications of 112 cases of tuberculosis were received. The number of deaths (81) is equivalent to a rate of .80 per 1,000 of the estimated mean population, the second lowest rate ever recorded for the City.

INFECTIOUS DISEASES HOSPITAL.

The Council's contribution towards the maintenance of the Queen's Memorial Infectious Diseases Hospital for 1927 amounted to £7,425/2/9, as compared with £7,376/10/6 for the previous year.

HEATHERTON SANATORIUM.

The Council's contribution towards the maintenance of the Heatherton Sanatorium for 1927 was £1,607/3/6, as compared with £1,654/13/- for 1926.

SMOKE NUISANCE.

Eighteen complaints of smoke nuisances were received during 1927, and 154 inspections and observations were undertaken. Alterations were effected at 26 premises for prevention of nuisance from smoke.

CONDEMNATION OF HOUSES.

The Committee continued to exercise vigilance regarding the sanitary condition of premises during the year. Two hundred and seventy-three premises were condemned, of which 203 were repaired, 21 demolished, and at the balance (49) renovating work was in progress at the end of the year. Five stables were also condemned, 14 demolished, 15 re-constructed, and 44 discontinued. No fewer than 1,274 condemned premises in the City have been demolished since 1913, under orders made by the Council on the recommendation of the Committee.

FOOD.

During the year, 321 samples of various kinds of food were purchased for the purpose of analysis in accordance with the provisions of the Health Act. Full details are set out in the report of the Medical Officer of Health.

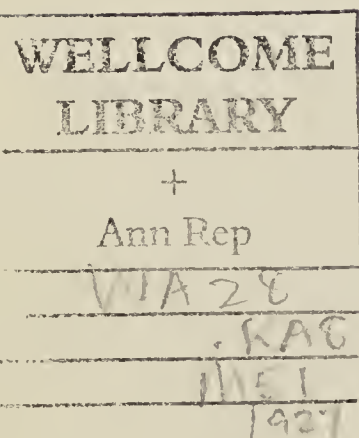
Seventeen milk samples did not comply with the standard, and prosecutions were instituted, which resulted in fines and costs being imposed, amounting to £85/2/-.

Prosecutions were also instituted in respect of 61 other breaches of the Health Act and regulations, the fines and costs imposed amounting to £242/5/6.

Nine seizures of food unfit for human consumption were made, and food utensils in defective condition were seized in five instances.

EATING HOUSES.

During the year 373 eating houses were registered, 49 were partly reconstructed, 41 were abolished, and registration was refused in one instance. Proceedings for breaches of the regulations were taken in nine cases, in respect of which fines and costs amounting to £23 were imposed.



With a view to exercising close supervision over these premises in the interests of the public, 5,394 inspections were made during the year by the Council's Health Inspectors.

PREMISES FOR THE MANUFACTURE OF ICE CREAM, AERATED WATERS, ETC.

The number of premises for the manufacture of ice cream and aerated waters registered with the Council last year was 149, as compared with 159 for the previous year. Inspections totalling 1,614 were made of these premises, and 5,482 inspections were made of other food premises during the year. Thirty-five premises were partly reconstructed, and 33 were abolished. In nine instances prosecutions were instituted, fines and costs amounting to £16 being imposed.

OFFENSIVE TRADES.

The Committee have continued to exercise supervision over offensive trade businesses, totalling 93 in the City, no fewer than 1,002 inspections having been made during the year by the Council's Health Inspectors. One new business was registered, while six premises were partly reconstructed. A full list of the premises registered in the City as offensive trade establishments is set out in the formal report to the Commission of Public Health, which has already been forwarded to the Commission in compliance with the provisions of the Health Act.

REGISTRATION OF BOARDING-HOUSES.

The number of boarding-houses registered with the Council last year was 673, as compared with 666 for the previous year, while 35 were partly reconstructed and 52 were abolished. In two instances prosecutions were instituted, fines and costs amounting to £5 being imposed. Inspections totalling 3,219 were made by the Council's Health Inspectors.

FACTORIES.

Four hundred and forty-nine applications for registration of premises as factories were dealt with by the Committee last year; 301 were approved, 14 refused, 58 withdrawn, and 76 were under consideration at the end of the year. These premises are registered by the Factories Department, after the Council has approved of the premises being suitable for registration. The number of registered factories and shops in the City is 2,288 and 4,053 respectively.

RAT INFESTATION AND DESTRUCTION.

The number of premises inspected and dealt with in connection with rat destruction in 1927 was 2,294, as against 2,182 in 1926, and the number of rats caught was 10,465, as compared with 9,597 for the previous year. The total amount collected in charges for the service of the rat-catching staff for rat destruction was £1,146, as compared with £1,027/8/3 for the previous year. Structural work for rat prevention was effected at 91 premises. The number of prosecutions was three, in respect of which fines and costs amounting to £6 were imposed.

HAIRDRESSERS' SHOPS.

Inspections totalling 1,472 were made of hairdressers' shops in the City last year, for the purpose of enforcing compliance with the regulations. Nineteen premises were reconstructed, and six were abolished.

MATERNITY AND CHILD WELFARE.

A summary of the maternal and child welfare work carried out at the four City Baby Health Centres is set out in the report of the Medical Officer of Health attached hereto.

The total amount paid by the Council towards the maintenance of Baby Health Centres for the year 1927 was £854/10/7, as against the Government's contribution of £500.

Dr. Hilda Kincaid was appointed by the Council in October, 1927, to act as Medical Officer for the supervision of the child welfare activities in the City, under the direction of the Medical Officer of Health.

SPECIAL MILK SUPPLY FOR INFANTS.

Special bottled milk for infants was again supplied at reduced rates, the number of infants participating in the supply being 185, as compared with 163 in 1926.

CAMPAIGN AGAINST POLIOMYELITIS (INFANTILE PARALYSIS).

Towards the end of the year the number of cases of infantile paralysis indicated a possible outbreak of epidemic proportions.

Preparation of human serum for the treatment of such cases was authorised by the Council, on the Committee's recommendation, in order to cope with any urgent cases.

The Committee printed pamphlets on the diagnosis and treatment of Poliomyelitis, and distributed them amongst the Metropolitan Municipalities, Metropolitan Medical Officers of Health, and Medical Practitioners generally in the Metropolitan area, with the object of combating this disease. Enquiries for this pamphlet have been received from other States, and it is believed that much good educational work has been effected by this means.

A letter was received from the Commission of Public Health, commending the Council for its campaign against this disease.

CARE AND AFTER-TREATMENT OF CRIPPLES.

The Committee are strongly of the opinion that better arrangements should be made for the care and after-treatment of crippled children, and they conferred with the Minister for Public Health on the subject. The matter is still under consideration.

QUESTION OF IMPROVED MILK SUPPLY.

The question of an improved milk supply for the Metropolitan area was again considered by the Committee.

A Conference of representatives of Metropolitan Municipalities (29) was held during the year to further consider the question, and a report was adopted by the Conference on the 11th March, 1927, in which it was recommended that the control of the Metropolitan Milk Supply should be vested in a Board consisting of Metropolitan Municipalities, Retailers, Producers and the Government.

This report was adopted by eight Municipalities (including the City Council), and eight other Municipalities adopted it with certain exceptions.

In view of the varying views of the Municipalities, the Conference was re-convened, at the request of the Box Hill Council, to consider the replies received from the Municipalities, and a Committee was appointed to give further consideration to the question.

The Conference ultimately adopted a report of the Committee, with certain amendments, in which it was recommended, *inter alia*, that the *regulation* of the Metropolitan Milk Supply should be vested in a Board consisting of the Chief Veterinary Inspector of the Department of Agriculture, one representative each of the Commission of Public Health, the Railways Department, Milk Producers, Milk Distributors, and the City Council, six Councillors representing six groups of Municipalities, and a Medical Practitioner; the Chairman to be elected by and from the members of the Board.

A Bill was simultaneously introduced into Parliament, providing, *inter alia*, for power being given to Metropolitan Municipalities to apply to the Governor-in-Council for permission to obtain a monopoly of milk supply in their respective areas, and to buy or take over any existing milk business, on a basis to be agreed upon, and in the event of disagreement, compensation to be determined by arbitration.

The Bill, which was supported by the Council, passed the Legislative Assembly, but was rejected on the second reading in the Legislative Council by 13 votes to 5.

HEALTH WEEK.

During Health Week in November, free public health lectures on the health of children were delivered in the North Melbourne and Kensing-

ton Town Halls and the Carlton Picture Theatre by the Medical Officer of Health (Dr. J. Dale) under the Council's auspices.

The lectures were well attended, and created great interest, the public generally expressing their appreciation of the Council's efforts in promoting the health of the children.

An inspection of the Free Kindergarten in Bouverie Street, Carlton, was made during Health Week by the Lord Mayor (Alderman Sir Stephen Morell), and the members of the Health Committee. The Committee were greatly impressed by the excellent work which is being carried out at this institution in the interests of the children.

EMERGENCY EPIDEMIC HOSPITAL.

An order was made by the Commission of Public Health, requiring the Council to provide a suitable hospital for the accommodation of persons suffering from infectious disease.

The Town Clerk replied that, as previously intimated, the Council was agreeable to bear its proportion of the cost of providing a suitable hospital in combination with the other Municipalities and the Government.

DEPOSITING OF RUBBISH IN STREETS AND LANES.

Action was taken during the year to abate the nuisance caused by the depositing of rubbish and burning of inflammable material in City streets and lanes. The co-operation of the police was sought, and a crusade throughout the City was made by the Council's inspectorial staff.

RESIGNATION OF DR. T. W. SINCLAIR, AND APPOINTMENT OF DR. J. DALE AS MEDICAL OFFICER OF HEALTH.

Owing to ill-health, Dr. T. W. Sinclair resigned from the position of Medical Officer of Health on 31st March, 1927, after fourteen years' distinguished service with the Council.

The Committee desire to place on record their appreciation of the able manner in which Dr. Sinclair carried out the duties of Medical Officer of Health.

Dr. J. Dale was appointed Medical Officer of Health in succession to Dr. Sinclair, and commenced duty on 1st June, 1927.

GENERAL.

Reference to the attached report of the Medical Officer of Health will show the detailed work carried out under the Committee during the year.

FRANK STAPLEY,

Chairman.

W. V. McCALL,

Town Clerk.

9th November, 1928.

CITY OF MELBOURNE

Report of the Medical Officer of Health for the
Year 1927

*The Chairman,
Health Committee.*

Sir—Dr. T. W. Sinclair, the Medical Officer of Health, resigned his office on April 20, after 14 years of distinguished service, and the duties were assumed by the writer on June 1. The present brief report is based upon the lines of those of former years.

The statistics relating to population, births and deaths show only slight differences from those of previous years.

INFANT WELFARE.

The infant welfare work of the City has been carried on, and much valuable work has been done in advising mothers and expectant mothers, and in making available a safe milk supply for infants and young children. Thanks are due to the local committee of the Victorian Baby Health Centres Association, and to that of the Red Cross Ladies' Auxiliary, for their assistance in conducting the centres as before. In August a comprehensive report upon Child Welfare was presented, in which it was urged that the work should be amplified and extended to embrace, as far as may be practicable, the whole of child life from its very beginning up to the age of school entrance. Emphasis was laid on the hygienic importance of the pre-school years, and of their relative neglect, and it was proposed that efforts should be made to co-operate with the various Kindergartens, to encourage their extension, and to erect any new health centres, the need for which is very apparent, in association therewith. This report was favourably received; as a result, the Council decided to appoint a medical officer to take charge of the work, and secured the services of a very highly qualified officer, Dr. Hilda Kincaid, who took up her duties in October. At the close of the year, the five infant welfare sisters were appointed as officers of the Council, and will work under Dr. Kincaid's direction.

INFECTIOUS DISEASE.

There occurred no striking prevalence of any infectious disease. The cases of scarlet fever showed some increase, but only one death was recorded. The disease was, however, epidemic in Sydney during the year, and preparations are being made to cope, as far as possible, with the increased prevalence which may reasonably be expected in Melbourne. Recent investigations have shown that it is possible, by means of a simple skin test, to determine whether an individual is or is not susceptible to the disease. It is also practicable to protect susceptible persons, temporarily by means of antiserum, or more lastingly by immunisation, as has been so extensively done against typhoid fever and other diseases. These procedures have been shown to be of great value in dealing with outbreaks in children's homes and among the staffs of hospitals, which have not infrequently been disorganised by the disease. Finally, a notable advance in the treatment of cases of scarlet fever has been achieved by the use of antiserum, which greatly reduces the severity of the disease, and it is most desirable that adequate stocks of antiserum should be on hand to meet an epidemic.

The incidence of diphtheria was somewhat higher, 192 cases being reported, as compared with 168 in 1926, but the number of deaths—five—was less by one. The rise in the incidence is in keeping with that experienced in the rest of the State and over the greater part of the Commonwealth. Analysis of the ages of patients, however, again shows that the proportion of cases of school age, 5-15 years, is lower than in the State as a whole. It is also lower than it was in the City prior to the beginning of the Council's anti-diphtheria campaign. This work was, unfortunately, interrupted during the first half of the year, owing to the resignation of Dr. Southby. The work was, however, resumed in July, when Dr. Hilda Bull was appointed, and excellent progress was made. It may be confi-

dently assumed that, should Victoria suffer an epidemic of the disease, the beneficial results of the work in the City will be apparent.

The other dreaded infections of childhood, namely, measles and whooping cough, were also relatively quiescent.

During the last five years, the deaths in Greater Melbourne due to diphtheria have totalled 245, due to whooping cough 303, and to measles 136. Moreover, the two last-named undoubtedly give rise, in non-fatal cases, to more serious complications and after-effects than does diphtheria. The reasons why, in the past, so little action has been taken against these diseases lies mainly in the fact that they have been regarded as inevitable, that they have been considered—most erroneously—as trivial, and that no special or specific methods of prevention and treatment have been available. But they are not inevitable or trivial, and special methods of prevention and treatment are now available. These diseases are most fatal and damaging during the pre-school years. The increased attention now being paid to the health of children of pre-school age under the Council's Child Welfare scheme will of itself have some beneficial effect in increasing the resistance and staying power of the children; but more than that is needed. In addition to the general attention given to young children, special attention is needed when the individual child is attacked or threatened with attack by one of these diseases. Affected households which contain young children should be visited, if possible, by a medical officer, certainly by a nurse, who acts under the doctor's instructions, and can call in the doctor when required. In this way, it will be possible to advise the mother regarding such matters as general hygienic precautions, isolation, necessity for medical treatment, and protection of the rest of the family. It is here, too, that advantage may be taken of the advances in medical science, which have placed at our disposal special means of protecting children from measles, whooping cough and scarlet fever, and of mitigating an attack. If a delicate infant has been exposed to measles, it is possible to avert the attack by a small dose of convalescent serum. The results of vaccination against whooping cough are sufficiently encouraging to fully warrant an extensive trial. Scarlet fever can be prevented by a dose of antiserum. The special procedures against these diseases, as detailed above, would probably not be required very often, except in epidemic periods, and would be undertaken, as far as possible, in conjunction with the doctors and hospitals; but full advantage will not be taken of them unless the officers of the health service take an active part, and realise that the times demand of them much more than the notification-isolation-disinfection routine of former years. It is necessary to carry the later knowledge into the homes of the people.

Typhoid fever showed an increase, ten cases being notified, as compared with four in 1926.

Only four cases of poliomyelitis were notified in the City during the year. In August, however, representations were made to the Health Committee that the stock of antiserum which had been left in the care of Dr. Macnamara at the close of the metropolitan anti-poliomyelitis campaign of 1925 was completely exhausted, and, as a result, a sum of £50 was made available by the Council, in order that a small stock of serum, and the organisation necessary to obtain further supplies, could be maintained. This proved of value when a number of cases, including two within the City, occurred at the close of the year.

GENERAL.

The work of the inspecting staff and the other duties of the office were carried on in a very satisfactory manner.

During the year 273 premises were reported for condemnation under the Health Act.

Since 1913 the number of condemned insanitary premises in the City, which have been demolished, is 1,274.

Activities in connection with smoke abatement were carried on as before, and considerable progress was made. The condition of the atmosphere in Melbourne, however, is still far from being as satisfactory and exemplary as it ought to be.

Proceedings were initiated by this office for various breaches of the Health Act and Regulations, and of the Council's By-laws in 59 instances, and the total fines and costs imposed amounted to £170/11/-.

Reports of 32 medical examinations of persons joining the Council's service, and of those retiring on account of ill-health, were furnished during the year.

POPULATION.

According to a return furnished by the Government Statist, the estimated mean population of the City for the year 1927 was 101,700, being 50 more than that for 1926.

BIRTHS.

The number of births allotted to the City of Melbourne by the Government Statist was 1,648. This corresponds to a birth rate of 16.2 per 1,000 of the estimated mean population. These figures are not comparable with those given in previous reports, which were calculated on data supplied direct to this office. It is felt, however, that these data were incomplete, and that no useful purpose will be served by continuing to attempt an independent estimate.

DEATHS.

The number of deaths of residents of the City, as supplied by the Government Statist was 1,236. In regard to deaths, also, it is proposed to discontinue the attempt to estimate rates, and to furnish an analysis of the causes, from records supplied direct to this office. Arrangements are being made with the Government Statist, who has kindly consented to supply certain details which will be presented in future years. An analysis of the deaths of 111 infants under one year, which were reported direct to this office, is included in the section dealing with Infantile Mortality.

The figures in Table I have been supplied by the Government Statist.

TABLE I.

Showing Population, Birth Rate, Death Rate and Infant Mortality Rate for Melbourne City for the following years:—

Year.	Estimated Mean Population.	No. of Deaths.	Death Rate.	No. of Births.	Birth Rate.	Infant Mortality.
1923	101,930	1,418	13.91	2,011	19.73	11.79
1924	101,960	1,310	12.85	1,843	18.08	9.12
1925	101,780	1,166	11.46	1,766	17.35	7.70
1926	101,650	1,192	11.73	1,791	17.62	7.76
1927	101,700	1,236	12.15	1,648	16.20	8.19

INFANT MORTALITY.

The number of births of children, whose mothers were resident in the City, was 1,746, whilst the number of deaths of infants under one year was 135, which represents an infant mortality rate of 8.19 per cent.

Reports of the deaths of only 111 infants were sent direct to this office, but it is hoped to make arrangements by which, in future, full particulars of all deaths of infants and young children will be received without delay.

Of the 111 deaths, 47, i.e., 42 per cent. were under one month, and 34, i.e., 30 per cent., were under one week.

The following list gives the causes of deaths of which particulars are available:—

Enteritis and Colitis	21
Pneumonia	16
Pulmonary Tuberculosis	3

Pertussis	2
Meningitis	8
Unspecified	4
Tubercular	2
Cerebro-Spinal	2
Cardiac Failure	7
Heat Exhaustion	1
Gangrenous Stomatitis	1
Malnutrition	1
Prematurity'	20
Inanition	8
Developmental Diseases (including Hydro- cephalus Atelectasis, Asphyxia, Icterus, Neo-natorum)	9
Congenital malformation of heart	5
Cerebral Haemorrhage	5
All other causes	4

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NOTIFIABLE INFECTIOUS DISEASES.

The following table gives the monthly number of notifications for each disease during 1927:—

Disease.	Jan.	Feb.	Mar.	Apl.	May.	Jne.	July.	Aug.	Sep.	Oct.	Nov.	Dec.	Year .
Scarlet Fever	2	3	10	6	9	16	11	6	9	15	8	11	106
Diphtheria	11	16	17	20	25	16	17	23	9	15	9	14	192
Typhoid Fever	1	3	2	1	1	—	—	—	—	1	1	—	10
Pulmonary Tuberculosis	6	9	12	3	11	15	11	12	4	4	6	8	101
Other Tubercular Disease	1	—	2	—	—	1	—	1	4	—	1	1	11
Cerebro-spinal Menin- gitis	—	—	—	2	—	—	—	—	1	—	—	—	3
Poliomyelitis	1	—	—	—	—	—	1	—	—	—	1	1	4
Puerperal Fever	—	—	1	1	—	—	—	—	—	—	—	—	2
Dysentery (bacillary) .	—	1	1	—	—	—	—	—	—	—	—	6	8
Encephalitis (lethargic)	—	—	—	—	—	—	—	—	—	—	—	1	1
Hydatid	—	—	—	—	—	—	1	1	1	—	—	2	5

SCARLET FEVER.

During the year 107 cases of scarlet fever were reported, 45 in males and 62 in females, being twice as many cases as in 1926. The attack rate is equivalent to 1.05 per 1,000 of the estimated mean population. The figures for the whole State showed a similar increase, but nothing comparable with the alarming rise in New South Wales. Though only one death occurred, in a male aged five years, there was reported an increase in the virulence of the disease, and in the number of complications observed. A rise in the number of adults attacked is to be noted, 19 cases occurring in children under five, 43 in the 5-15 group, and 45 among adults, which is partly explained by the incidence of the disease among the nursing staff of one of the hospitals, thirteen of the institutional cases being among the nurses.

The tendency for multiple infection to occur in a family was illustrated by the fact that 23 cases of scarlet fever occurred in nine houses. In two of these, four members were attacked, in one three, and in six instances two members of the family contracted the disease. In the majority of these, the dates of onset were either simultaneous, or separated by so short an interval as to suggest infection from a common source; but in three households the later cases were apparently infected from the first. There were no return cases in families after an affected member had returned from hospital. In 78 houses there were 92 cases,

and in four institutions there were 15 cases, 11 being in one hospital. Two other hospitals had one case each, and a children's welfare institution had two.

The Council's Nurse paid 61 visits to homes and institutions to make enquiries, and give the necessary advice and instructions.

DIPHTHERIA.

The number of cases notified was 192, so that the incidence of diphtheria in the City is still comparatively low. Though a slight increase is shown over the number recorded for the two previous years, the reported cases for these last three years constitute the lowest figures for 20 years. It is interesting to note in this connection that the diphtheria statistics of the Commonwealth Health Department show an upward tendency in the curve of incidence of diphtheria in every State except South Australia. The attack rate for 1927 is equivalent to 1.78 per 1,000 of the estimated mean population. Five deaths occurred, three in males and two in females. The ages were 2, 3, 3, 5, 7, so that only one death occurred in a child of school age. The death rate is equivalent to .049 per 1,000 of the population, and the case fatality rate only 2.6 per cent.

Twenty-seven of the cases occurred amongst the staffs or inmates of various institutions as follows:—

Public Hospitals, 16 cases; Children's Institutions, 10; and one in another institution. In four instances inquiries made suggested that the infection was probably contracted outside the city, and four cases were reported also to be suffering from scarlet fever. In nine instances more than one member in a family was affected; in six instances there were two cases affected, and in three instances three members of the same family were affected. In three of these nine instances the infection was apparently due to "return" cases.

The swing of the age incidence of diphtheria, usually a disease of the child of school age, is still marked, 75 cases occurring in adults and 51 in pre-school children, and only 66 in children of school age.

	Under 5 years.	5 to 15 years.	15 years and over.
1915-24	24.6	51.2	24.2
1925	23.3	33.1	43.6
1926	27.9	36.9	35.2
1927	26.6	34.4	39.0

FOR THE WHOLE OF THE STATE.

1927	23.1	44.1	32.8
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The decrease in cases among children of school age would be expected where the new methods of prevention have been employed. Although the percentage of children who have been treated is hardly high enough to lead to dramatic results, the indications seem to be that they are having a beneficial influence on the spread of the disease.

Of the fatal cases, none had received any preventive treatment, and the fact that four out of the five fatalities occurred in children of pre-school age justifies the efforts which were made during the year to treat these children. By the permission of the Education Department, each school was made a centre for the district, and an intensive campaign by the Health Inspectors resulted in a certain number of pre-school children being brought to the schools for treatment.

The Council's Nurse paid 261 visits to homes of cases, and 18 visits to schools and institutions in order to inquire into the history of contacts, and give advice on the prevention of the spread of the infection. She also took 564 swabs for bacteriological examination, and during the latter half of the year visited the schools on 56 occasions to give assistance in the work of Schick testing and immunisation.

The report of Dr. Hilda Bull, which is attached, gives an account of the special campaign during the latter half of 1927.

TABLE II.

Showing the Incidence, Mortality and Case Fatality of Notified Scarlet Fever, Diphtheria and Typhoid Fever in the City for the following years:—

SCARLET FEVER				DIPHTHERIA			TYPHOID FEVER		
Year	Cases	Deaths	Case Fatality per cent.	Cases	Deaths	Case Fatality per cent.	Cases	Deaths	Case Fatality per cent.
1898 . .	106	—	—	154	18	12.68	237	27	11.39
1899 . .	36	—	—	84	10	11.90	164	16	9.75
1900 . .	6	1	16.66	120	3	2.50	118	16	13.56
1901 . .	15	1	6.66	91	4	4.39	86	8	9.30
1902 . .	164	1	.61	122	5	4.09	92	9	9.84
1903 . .	184	1	.54	110	5	4.54	69	5	7.24
1904 . .	165	3	1.81	142	12	8.45	58	6	10.34
1905 . .	28	—	—	142	4	2.81	33	2	6.06
1906* .	23	—	—	130	9	6.92	95	8	8.42
1907 . .	11	—	—	254	13	5.11	34	3	8.82
1908 . .	85	—	—	213	7	3.28	113	3	2.65
1909 . .	346	13	3.75	194	7	3.60	90	9	10.0
1910 . .	116	3	2.58	326	10	3.06	178	8	4.49
1911 . .	35	1	2.85	485	16	3.29	51	9	17.64
1912 . .	21	—	—	414	32	7.73	52	6	11.54
1913 . .	14	—	—	311	18	5.78	53	5	9.43
1914 . .	38	—	—	297	15	5.05	36	5	13.88
1915 . .	62	1	1.61	463	23	4.96	23	5	21.77
1916 . .	136	1	.73	581	29	4.99	23	4	17.39
1917 . .	141	2	1.41	345	11	3.18	18	3	16.66
1918 . .	160	1	.62	564	10	1.77	11	2	18.18
1919 . .	84	3	3.57	298	22	7.38	8	1	12.50
1920 . .	129	2	1.55	371	10	2.69	8	1	12.50
1921 . .	167	—	—	429	13	3.03	10	1	10.0
1922 . .	112	2	1.78	268	3	1.12	8	1	12.50
1923 . .	165	2	1.21	250	11	4.40	10	1	10.0
1924 . .	226	2	.88	342	9	2.63	10	1	10.0
1925 . .	89	2	2.24	163	1	.61	4	1	25.0
1926 . .	45	1	2.22	168	6	3.57	4	1	25.0
1927 . .	106	1	.94	192	5	2.60	10	4	40.0

*Hopetoun Ward added to the City.

TYPHOID FEVER.

There was an increase in the number of cases and deaths from this disease. Ten cases, with four deaths, occurred, compared with four cases and one death in each of the two previous years. Seven cases were in males, and three in females, and two in each sex were fatal.

There were two institutional cases, one in a nurse; the other is recorded as having been contracted by a child aged 11 years while in hospital. This was a case of diabetes mellitus, who developed fever while in hospital, and was positive to the Widal test. The source of infection was not traced.

Nine of the cases were treated in hospital, and a positive Widal reaction was recorded in five instances; in one case the reaction was to paratyphoid B.

Three deaths occurred among the eight cases aged over 18 years, and one in a boy aged 16 years. Of the fatal cases, one had diphtheria as well as typhoid, but died of typhoid; while another, a male aged 25, died of typhoidal meningitis.

It was not possible in any case to trace the source of infection, but in three cases uncooked green vegetables had been partaken of freely, and were suspected.

DYSENTERY.

Eight cases of bacillary dysentery were reported, compared with nine in 1926. Seven of these were notified as due to the Flexner organ-

ism. Three of the cases belonged to the Children's Welfare Depot, Royal Park. Five of the cases were males, and three females. Only one case occurred in a child under one year of age; one case occurred in an adult aged 30 years, five occurred in children between two and five years of age. Six of the cases were notified in December, one in February and one in March. There was one death—age being $2\frac{1}{2}$ years—compared with three deaths under one year in 1926.

CEREBRO-SPINAL MENINGITIS.

Three cases of this disease were notified, all in infants. They were admitted to hospital, and died. The source of infection could not be traced.

POLIOMYELITIS.

Four cases were reported during the year, all in little girls, the youngest of whom was one year and seven months, and the oldest three years.

One case died within 36 hours of the commencement of the illness. In only one case was the onset sufficiently gradual for recognition to be possible, and for serum to be used. The cases were all wide-spread, both in time and in space, and no connection at all could be traced between them or with any case outside the City. Particulars are as follows:—

A.W., aged 2 years and 3 months. Notified January 2, 1927. This child became languid, and then developed convulsions, and died in the Queen Victoria Hospital within 36 hours of the commencement of the illness. No post-mortem was made, but the finding in the cerebro-spinal fluid was consistent with the diagnosis of polio-encephalitis.

B.W., aged 1 year and 11 months. Notified July 23. Paralysis of the right leg was the first sign noticed. The child was treated at the Children's Hospital, and is still under treatment, progressing satisfactorily.

G.I., aged 3 years. Notified November 26. Onset gradual. Treated at the Children's Hospital, and serum given. The case is still under observation, and progressing satisfactorily.

B.G., aged 1 year and 7 months. Notified December 12. Weakness of right arm was first sign noticed. The case was treated at the Children's Hospital, was very mild, and recovery was complete.

ENCEPHALITIS (LETHARGIC).

Only one case was reported, compared with three in 1926, and two in 1925. This case was in a female aged 30 years, who was admitted to the Melbourne Hospital, with the history of illness for about one week, and died next day. There was some doubt about the diagnosis, and, since the illness occurred at a time when the prevalence of poliomyelitis was increasing, it is possible that this was an encephalitic infection with the virus of that disease.

HYDATID DISEASE.

There were five cases notified in the City, as compared with one last year. All were in males, and there was one death. In four of the cases the liver is recorded as the site of the infection, whilst in the fifth the site of the lesion is not specified.

1.—H.R., male, aged 58 years. Occupation, pig and poultry dealer, outside the City, for 24 years. He had resided in the City for the past two years, and had not handled pigs or dogs during that time. He was admitted to Melbourne Hospital for operation.

2.—L.S., male, aged 16 years. He lived in the country on a market garden for nine years, where water was drawn from an underground tank supplied from a creek. Dogs kept there had been fed on raw plucks. He then went to China for six years, and had symptoms suggestive of hydatid disease whilst there. He was admitted to the Melbourne Hospital for treatment, and discharged convalescent.

3.—C.M., male, aged 30 years. This was the only fatal case. He had worked on a mine in Tasmania for ten years previously, where a dog had been kept, and the water supply was drawn from a drain. He gave

a history of three or four attacks yearly for the past six years. He was admitted to the Melbourne Hospital, had an operation, and died 13 days later.

4.—Male, aged 43 years. This patient noticed symptoms only about a week before seeking treatment. The only history suggesting opportunity of infection was that he went away shearing every season, though he had not been into the country for the past two years. He had lived in the City for thirty years, and no dogs were kept on the premises. He was operated on at the Melbourne Hospital.

5.—A.F., male, aged 60 years. He had complained of symptoms for the last twelve months, but the only history suggestive of a possible source of infection was of visits to the country eighteen to twenty years ago, where the drinking water was taken from a waterhole. He received treatment at St. Vincent's Hospital.

TUBERCULOSIS.

The number of notifications received from medical practitioners was 112, of which 101 were for pulmonary tuberculosis, and 11 for other forms of tuberculosis. The deaths from phthisis registered during the year numbered 64, compared with 57 in 1926, and are equivalent to the low death rate of .63 per 1,000 of the estimated mean population.

The number of cases of phthisis from the City admitted through the Tuberculosis Bureau of the Public Health Department to sanatoria was as follows:—Heatherton, 36; Greenvale, 22; Amherst, 16; Austin Hospital, 28; and Janefield, 10.

The notifications and deaths from phthisis for the years 1913 to 1927 are given below:—

Year	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927
Notifications	156	158	124	120	105	107	100	94	96	78	94	89	96	75	101
Deaths . . .	93	106	76	97	82	90	84	101	116	81	97	89	93	57	64

The deaths from all forms of tuberculosis numbered 81, compared with 61 in 1926, and are equivalent to a death rate of .80 per 1,000 of the estimated mean population, the second lowest ever recorded for the City. The Council's Nurse paid 1,253 visits to the homes of cases, and to patients who had been discharged from sanatoria, distributing the leaflet of precautions against the disease, and advising measures to be carried out in order to minimise the spread of infection.

The distribution of notified cases in the various wards of the City is shown in Table III.

TABLE III.

Showing population and distribution of notified cases in the various Wards of the City for 1927:—

Ward	Albert	Bourke	Gipps	Hope- toun	La- trobe	Lons- dale	Smith	Vic- toria	Total for City
Estimated Mean Population . . .	8,990	12,790	6,740	31,090	3,720	2,540	14,500	21,380	101,750
Scarlet Fever . . .	8	2	3	43	2	—	22	26	106
Diphtheria	19	12	5	54	1	—	51	50	192
Typhoid Fever . . .	1	1	—	3	—	—	1	4	10
Pulmonary Tuber- culosis	6	22	4	30	3	1	16	19	101
Other Tubercular Diseases	1	1	—	2	—	—	2	5	11
Cerebro - Spinal Meningitis	—	—	—	1	—	—	2	—	3
Polio-myelitis	—	1	—	3	—	—	—	—	4
Puerperal Fever . .	—	—	—	1	—	—	1	—	2
Dysentery (Bacil- lary)	—	—	—	2	—	—	6	—	8
Encephalitis (Lethargic)	1	—	—	—	—	—	—	—	1
Hydatid	—	1	1	3	—	—	—	—	5

PUERPERAL FEVER.

Two cases of puerperal sepsis were reported by medical practitioners, as compared with three cases last year. There was one death, in a multipara, aged 36 years, about two weeks after delivery. The other case was a post-abortal septicaemia, with general peritonitis, which recovered.

MATERNITY, AND CHILD WELFARE.

During 1927 maternity and child welfare work has been carried out at the Baby Health Centres at Rathdown Street, North Carlton; the Women's Hospital, Carlton; the Flemington Town Hall; Abbotsford Street, North Melbourne; and at the North Melbourne Town Hall, where there is a sub-centre managed by the Sister in charge of the Abbotsford Street Centre. The main work at the centres has been baby health work, but expectant mothers have also been given advice as to ante-natal care and hygiene. There have been four Sisters throughout the year in charge of the centres, and in December a Relieving Sister was also appointed. Dr. Kincaid was appointed by the Council in October to act as Medical Officer for the Supervision of the Child Welfare activities in the City, under the direction of the Medical Officer of Health. She commenced duty on November 28.

The special bottled supply of pasteurised milk from the Willsmere Co. has been continued. 185 children were supplied, as follows:—Carlton Centre, 75, North Carlton, 25; North Melbourne, 37; Flemington, 48.

The following table has been compiled from the returns furnished by the four City Centres:—

Number of new babies attending	1,137
Number of individual babies attending	1,987
Total number of attendances of babies	13,257
Total number of attendances of expectant mothers	347
Numbers of individual expectant mothers	246
Number of visits paid by nurses to homes ..	6,157
Number of babies referred to doctor or hospital	609
Number of cases attending with diarrhoea ..	62

Of the total number of babies attending under nine months of age, 65 per cent. were breast-fed; 11 per cent. were partially breast-fed; 24 per cent. were artificially fed.

FOOD ADULTERATION.

321 samples of food were purchased for purpose of analysis:—Milk, 287; condensed milk, 1; coffee and chicory, 1; coffee, 2; ground ginger, 2; mustard, 12; white pepper, 9; vinegar, 7.

Seventeen milk samples did not comply with the standard, and prosecutions were instituted, which resulted in fines and costs amounting to £85/2/- being inflicted.

The number of samples of milk purchased for analysis disclosed 5.9 per cent. of adulteration.

One sample of coffee and chicory was not labelled as required by the Food and Drug Standards Regulations. A prosecution was instituted, and a fine and costs amounting to £3/13/6 was inflicted.

Two samples of coffee were found to contain chicory. Prosecutions were instituted, and fines and costs amounting to £7/7/- were inflicted.

The total number of adulterated samples of foods was 20. The total fines and costs imposed for food adulteration amounted to £96/2/6.

Nine seizures of food unfit for human consumption were made, comprising flour, raisins, tinned tomatoes, tinned fish, tinned vegetables, tinned mushrooms, jam, golden syrup, tinned fruits, desiccated cocoanut, coffee and chicory, curry powder, chutney, essences, sauces, currants, oatmeal, tea, condensed milk and cheese. Five seizures were also made of food utensils on account of their defective condition.

For breaches under the Health Act and Regulations relating to food premises and food sold for human consumption, proceedings were taken in 38 cases, and fines and costs amounting to £135/2/6 were imposed.

Three samples of milk were submitted to Dr. Hilda Rennie for bacteriological examination.

FOOD ADULTERATION.

Year	Number of Samples of Milk Purchased	Number of Samples Adulterated	Percentage of Adulterated Samples
1908	264	50	18.9 per cent.
1909	218	18	8.2 „
1910	194	19	9.8 „
1911	196	15	7.6 „
1912	211	21	9.9 „
1913	292	13	4.4 „
1914	285	13	4.5 „
1915	294	29	9.8 „
1916	298	20	6.7 „
1917	277	19	6.8 „
1918	284	9	3.1 „
1919	296	23	7.7 „
1920	292	18	6.1 „
1921	261	17	6.5 „
1922	257	8	3.0 „
1923	274	14	5.1 „
1924	270	14	5.1 „
1925	289	16	5.5 „
1926	292	12	4.1 „
1927	287	17	5.9 „

NEW LEGISLATION.

During the year the following new legislation, issued by the Governor-in-Council, under the Health Act 1919, and other Acts, came into operation in the City:—

Building (Schools) Regulations 1927.

Cleanliness (Food) Regulations 1927.

Cinematograph Operators Regulations 1927.

Proclamation declaring the trade usually carried on in connection with Electric Accumulator Works to be a Dangerous Trade.

Food and Drug Standards Regulations 1927.

Camping Regulations 1927.

ROUTINE DEPARTMENTAL WORK.

Disinfection by Council's Staff.—No. of rooms: Scarlet Fever, 60; Diphtheria, 145; Tuberculosis, 95.

Medical certificates furnished by occupiers for room disinfection, 29; bedding destroyed by owner, 6. Fees received for disinfection by Council's staff, £1/17/6.

Insanitary Premises.—Number reported, 273; number demolished, 21; number repaired, 203; number work in progress, 49; number of inspections and re-inspections, 5,717.

Stables.—Number reported for condemnation, 5; number demolished, 14; number reconstructed, 15; number discontinued, 44; number of Nuisance Notices served, 8; number complied with, 8; number of prosecutions, nil.

Eating Houses.—Number registered, 373; number refused registration, 1; number of inspections, 5,394; number partly reconstructed, 49; number abolished, 41; number of reports, 421; number of prosecutions, 9; fines and costs imposed, £23.

Manufacture of Ice Cream and Aerated Waters, etc.—Number registered 149; number of inspections, 1,614; number partly constructed, 7; number abolished, 19; number of reports, 153.

Other Food Premises.—Number of inspections, 5,482; number partly reconstructed, 28; number abolished, 14; number of prosecutions, 9; fines and costs imposed, £16.

Boarding houses.—Number registered, 673; number of inspections, 3,219; number partly reconstructed, 35; number abolished, 52; number of reports, 691; number of prosecutions, 2; fines and costs imposed, £5.

Common Lodging Houses.—Number registered, 39; number of inspections, 467; number partly reconstructed, 7; number abolished, 4; number of reports, 39; number of prosecutions, nil.

Hairdressers' Shops.—Number of inspections, 1,472; number partly reconstructed, 19; number abolished, 6; number of reports, 2; number of prosecutions, 5; fines and costs imposed, £3.

Offensive Trades.—Number registered, 93; number refused registration, nil; number of inspections, 1,002; new premises registered, 1; new premises erected, 1; number partly reconstructed, 6; number of reports, 101; notices under regulations served and complied with, 7; number of prosecutions, nil.

Cattle Sale Yards.—Number registered, 2; number of new premises registered, nil; number refused registration, nil; number abolished, nil; number of inspections, 22; number of reports, 4; number partly reconstructed, 1;

Factories.—Number of applications for approval, 19; number approved (Health Act), 15; number of inspections, 734; number of Reports, 19; total premises in City registered by Factories Department: factories, 2,288; shops, 4,053.

Rat Destruction.—Number of complaints, 359; number of premises visited, 2,294; number of rodents (rats and mice) taken, 10,465; structural work effected at premises for rat prevention, 91; notices under Rat Destruction Regulations served and complied with, 66; charges for rat destruction, £1,146; number of prosecutions, 3; fines and costs imposed, £6.

Smoke Nuisance.—Number of complaints, 18; number of inspections and observations taken, 154; number of premises where alterations were effected for prevention of smoke, 26; (including reconstructed furnaces, 11; oil fuel, 3; increased electrical power, 7; special smoke-consuming apparatus, 5); number of prosecutions, nil.

Nuisance Notices.—Served and complied with—defective sanitary conveniences, 70; defective drainage, etc., 41; neglect to clean premises or yards, 82; number of prosecutions, 4; fines and costs imposed, £8/6/6.

Hospitals.—Number of private hospitals in City registered by Commission of Public Health, 22; number of inspections, 5; number of reports, 4.

Public Buildings.—Number of dancing saloons registered, 19; number of places of pastime registered, 3; number of day and evening inspections made, 741; number of reports, 113; number of public buildings in City registered by Commission of Public Health, 56; number of prosecutions, 1; fines and costs imposed, £18/2/-.

General.—Plans submitted for examination, 119; number of inspections of yards, 12,838; of lanes, 1,508; number of notices served and interviews with property owners, etc., 1,462; applotment notices served re streets and lanes, 21; complaints received and attended to, 445; inspections of vacant land under By-law 186, 318; fire reports received and attended to, 257; special complaints where females were employed received and attended to, 24; instructions served on householders for infectious disease, 430; for pulmonary tuberculosis, 232; special visits to cases in connection with diphtheria campaign, 5,492; poliomyelitis campaign, 8; special visits by Female Health Inspector, 1,575; (scarlet fever, 61; diphtheria, 261; pulmonary tuberculosis, 1,253); returns furnished to Public Health Department for Infectious Diseases, 457; new registrations and transfers, 305. Notices of infectious disease sent to schoolmasters, 207; specifications of works sent to owners, agents, etc., 346; matters referred to City Engineer, 55; to By-laws Officer, 6; to Dog Inspector, 14.

Yours faithfully,

JOHN DALE, O.B.E., M.D., B.Sc. (Pub. Health),

Medical Officer of Health

Medical Officer of Health's Office,
Town Hall, Melbourne.

31st July, 1928.

Medical Officer of Health's Office,
Town Hall, Melbourne,
20th March, 1928.

REPORT OF THE DIPHTHERIA CAMPAIGN FOR THE YEAR 1927.

The Medical Officer of Health,

Sir—I have the honor to submit the fourth annual report of the campaign against Diphtheria. During the year various schools and institutions were visited, and the work of Schick-testing and immunisation was carried on amongst those children whose parents were willing to take advantage of these methods for the prevention of diphtheria.

Institutions Visited.—Owing to the fact that the work was not begun until the end of July, it was not possible to include more than half of the schools in the City, but nineteen institutions were visited; nine State schools, including Infant schools, six primary Roman Catholic schools, one Church of England school and three Children's Welfare homes, and the response among these was so satisfactory that over two thousand children were treated.

Consents Received.—In the State schools the co-operation of the teachers made it possible to get figures indicating the proportion of children whose parents had availed themselves of the opportunity of obtaining preventive treatment, compared with those who had refrained. Of a total number of 5,190 children attending nine schools, 1,723 consents were received in 1927, 815 had already been treated, and 2,652 had never presented themselves, so that 33 per cent. were treated in 1927, and 16 per cent. in former years, making a total of 49 per cent. of these children who have been either found Schick-negative or have been completely or partially immunised.

Lectures Given.—Preliminary talks were given to the parents and to the teachers whose interest and help have been invaluable. Latterly, the older children have also had the theory and practice of the method explained to them. Requests for lectures have been received from several Mothers' Clubs connected with the State schools, and a meeting of their delegates from all over the State was addressed. A keen interest has been displayed by the mothers in the question of Preventive Medicine.

Reactions to Injections.—The parents and teachers have always been urged to report any cases which seemed to indicate that any untoward reactions were caused by the injections, but in no case has there been any indication that the slightest trouble has been caused by the inoculation. A slight stiffness of the arm has sometimes been observed in the older children, but it has been mild and transitory, and during the last few months even this reaction has been practically absent.

Result of Schick Testing.—As many of the children, who had been found Schick-negative in previous years, did not present themselves for re-testing, the proportion of those found Schick-positive is slightly higher than it would be in an untreated population. Also children under seven years of age were immunised without testing, so that, of over 2,000 children presenting themselves, more than 1,100 were completely immunised and nearly 300 partially immunised.

Throat Inspections.—Throat inspections were carried out in the majority of cases, except in the Welfare institutions, who had their own Medical Officer. On the whole, the throats were more satisfactory than might have been expected, and the large number who have had tonsillectomy suggests that the work of the Education Department and the Council's Medical Officers is having effect. The importance of dealing with the throat condition in any preventive campaign against diphtheria has again been clearly demonstrated. There are on record the results of the examination of 1,730 throats, 388 of which showed previous tonsillectomy, 448 were unhealthy, and 894 showed no gross defects. Thus 51 per cent. were regarded as satisfactory, 27 per cent. as unhealthy, and were recommended for treatment, and 22 per cent. showed that previous unhealthy condition had been rectified by tonsillectomy.

In making an effort to correlate the state of the tonsils with the results of the Schick-test, the figures seemed to indicate that although the relation was not a striking or definite one, on the whole, those children with unhealthy tonsils or those who had had them removed, were rather more likely to be Schick-negative than children whose throats were clear. As an unhealthy throat might more often harbor diphtheria

germs, the development of an immunity in some cases would be not unexpected. The figures, exclusive of results considered doubtful or slight, show that in healthy throats 53 per cent. were Schick-positive, in unhealthy throats 48 per cent., and in those whose tonsils had been removed 45 per cent.

TABLE

Schick Test	Tonsillectomy done.		Throat unhealthy.		Throat clear.	
	Positive.	Negative.	Positive.	Negative.	Positive.	Negative.
Totals . . .	130	152	150	162	329	287

Children previously treated who have come under observation during the year.—Several children who were treated previously have come under observation during the year.

There have been no cases of diphtheria in any children who have been completely immunised and subsequently re-tested, and no deaths in any immunised or Schick-negative child. Only in two cases did a child who had three immunising doses develop diphtheria, and in one of these the protection had not had time to develop. The other showed a very mild clinical diphtheria in a child who had been immunised but not re-tested.

Of children shown by previous tests to be Schick-negative, three developed mild cases of diphtheria, three were found to be carriers, and one proved to be a doubtful case and gave a negative swab. In cases with chronically enlarged tonsils, and a negative Schick-reaction, the border line between the carrier and clinically sick child is very finely drawn.

Five children shown to be Schick-positive who had been incompletely immunised, developed diphtheria, also two proved susceptibles who refused immunisation. Two other children found to be Schick-positive developed diphtheria before there was time to give them any preventive inoculation. No severe case occurred in negative or even partially immunised children, and no deaths.

A table showing the details of schools visited, the total number treated and the figures for Schick testing and immunisation is attached. Owing to the resignation of Dr. Southby at the beginning of the year the work was in abeyance until the end of July, and figures relate therefore only to the last five months of the year.

In conclusion, I should like to express my deep appreciation of the cordial and friendly attitude of the teachers, as well as of their keen scientific interest, and my gratitude for their assistance. I was pleased, too, at the interest displayed by the Mothers' Clubs, and wish especially to thank those Infant Mistresses through whose sympathetic efforts the parents of so many of the younger children were willing to allow them to be treated.

Yours faithfully,

(Sgd.) HILDA BULL, B.Sc., M.B., B.S.

TABLE REFERRED TO IN THE REPORT OF THE DIPHTHERIA CAMPAIGN FOR THE YEAR 1927.

No.	School	Total	Schick. negative	Positive immun- ised	Immun- ised with- out test- ing	Total immun- ised	Incom- plete
1.	Princes Hill—						
	Senior	243	95	113	—	—	35
	Infant School	171	37	33	78	224	23
2.	Yarra Park—						
	Senior	231	98	80	8	—	45
	Infant School	57	—	—	45	133	12
3.	Leonard St. Home . . .	42	9	14	16	30	3
4.	St. Martin's Primary . .	35	5	16	5	21	9
5.	Faraday Street	220	94	65	27	92	34
6.	Rathdown Street	168	54	52	28	80	34
7.	Kildonan Home	38	22	15	1	16	—
8.	St. George's Boys' . . .	49	19	22	3	25	5
9.	St. George's Girls' . . .	82	39	24	11	35	8
10.	Queensberry St., Carlton	85	40	26	10	36	9
11.	Queensberry St., N. Melb.	85	32	19	19	38	15
12.	St. Mary's Girls'	33	8	11	7	18	7
13.	St. Michael's	18	5	5	7	12	1
14.	Errol St., Nth. Melb. . .	106	34	38	22	60	12
15.	St. Mary's Boys'	60	21	26	5	31	8
16.	St. Francis	25	9	8	5	13	3
17.	South Yarra	229	68	116	23	139	22
18.	Royal Park Homes	93	26	44	—	44	23
19.	Lee Street Infants' . . .	133	31	46	47	93	9
	Totals	2,203	746	773	367	1,140	317

THE UNIVERSITY OF MELBOURNE
BACTERIOLOGY LABORATORY

Carlton, 22nd February, 1928.

Annual Report on the Bacteriological Examinations undertaken on behalf of the Melbourne City Council by the Bacteriological Laboratory, Melbourne University, for the year 1927.

Diphtheria.—The details of throat swab examinations were as follows:—

Of the 564 swabs examined, 11 contained diphtheria bacilli; 8 contained pseudo-diphtheria bacilli, and 545 cocci only.
Three specimens of sputum were forwarded and examined, but no evidence of tubercle bacilli was detected.

Examination of Samples of Water from the City Baths.

- No. 1—Yan Yean water before filtration and chlorination.
- No. 2—Water from filter, without chlorination.
- No. 3—Water at outlet end of Men's Bath.
- No. 4—Water at outlet end of Women's Bath.
- No. 5—Water from common suction well after passing through the baths.

Result of Examination.

Sample.	Micro-organisms. Per c.c.	Lactose Fermenters (coliform organisms).		
		1-10th c.c.	1 c.c.	100 c.c.
No. 1	156	—	+	+
No. 2	5	—	—	—
No. 3	1	—	—	—
No. 4	22	—	—	—
No. 5	36	—	—	—

The result of the examination of these samples taken 24th January is very good, showing by the low bacterial count, and absence of excremental organisms, the beneficial results of chlorination and filtration.

(Signed) HILDA RENNIE,
Acting-Director, Bacteriology Laboratory.

MELBOURNE ANALYTICAL LABORATORY

27 William Street, Melbourne

12th January, 1928.

*The Chairman,
Health Committee,
City of Melbourne.*

Sir—We have the honor to report that during the year ended 31st December, 1927, we have received 322 samples of Food and Drugs. The following is a brief summary of the results obtained by the Analytical Examinations.—

Milk—287 samples*	270 complied with the standard. 5 below the standard in their percentage of total solids, solids not fat, and fatty solids (milk fats). 5 below in their total solids, and solids not fat. 2 below in their total solids, and fatty solids (milk fats). 5 below in their fatty solids (milk fats).
Sweetened Condensed Milk—1 sample	Complied with the standard.
Vinegar—7 samples	Complied with the standard in their amounts of acetic acid. No mineral acid or coal-tar colouring was detected.
Mustard—12 samples	Complied with the standard.
Ground Ginger—2 samples	Complied with the standard.
Coffee and Chicory—1 sample	Complied with the standard.
Coffee—2 samples	Did not comply with the standard in their percentage of saccharine matter and contained chicory.
White Pepper—9 samples	8 complied with the standard. 1 contained a small amount of ginger starch, probably due to accidental causes, otherwise complied with the standard.
Formalin—1 sample	Contained 36.4 per cent. of formaldehyde by weight.

*Samples Nos. 147, 148 and 149 were duplicated, vide Quarterly Reports for Quarters ended 30th June and 30th September, 1927.

Yours obediently,

(Sgd.) DUNN & SON,

Analysts to the City of Melbourne